

## ABSTRACT

In order to provide a novel Lewis acid catalyst, which shows high reaction activity in aqueous medium, is easily recovered, and is excellent in reusability, a Lewis acid group expressed by the general formula (I):



(wherein M represents a polyvalent element, X represents an anionic group, and n is an integer representing the valence of M)

is linked and supported on a polymer membrane via an  $\text{SO}_3$  or  $\text{SO}_4$  group.